## APR 0 4 2005

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Peter R. VOORHEIS Attorney Docket No: B02-31

Application No.: 10/614,325 Group Art Unit: 1712

Filed: July 7, 2003 Examiner: D. Buttner

For: CARBON-CARBON INITIATORS FOR USE

IN GOLF BALLS

## **DECLARATION OF PETER VOORHEIS UNDER 37 C.F.R. § 1.132**

Mail Stop Amendment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## L Peter R. Voorheis, hereby declare that:

I am a citizen of the United States and reside at 291 Belleville Ave, Apt. 2, New Bedford, MA 02746;

I am the sole inventor of the invention disclosed and claimed in the above-identified patent application;

I am currently employed as a Rubber Chemist at the ACUSHNET COMPANY (formerly doing business as Titleist and FootJoy Worldwide), 333 Bridge Street, Fairhaven, MA 02719, the Assignee of record of the entire, right, title and interest in the invention claimed in the present application;

I have been employed at ACUSHNET COMPANY for five years, working with golf ball core formulations, and the mixing, molding, and manufacturing thereof;

I hold a bachelor's degree in chemical engineering from Michigan State University.

I am an inventor on at least 34 U.S. patents and applications related to golf ball and golf ball core materials, design, and manufacturing; and

I am a member of the American Chemical Society, Rubber Division.

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I hereby declare that the high-temperature cured, highly vinyl-crosslinked, high vinyl content polybutadiene, as taught by U.S. Patent No. 5,118,763 to Aoki *et al.* ("Aoki"), is unsuitable for use as a predominant base polymer in a golf ball core.

Aoki teaches a polybutadiene having a vinyl content of not less than 40%, cured at temperatures of between 240°C and 320°C, to crosslink at least 70% of the vinyl content. The polybutadienes of Aoki are high vinyl polybutadienes (highly crosslinked at the vinyl site) and would have a high glass transition temperature. When used as the base polymer for a golf ball core formulations, these high vinyl butadienes would result in very hard, low coefficient of restitution cores (resiliency), unsuitable for use in golf balls. In fact, conventional high-cis polybutadienes, as disclosed and used in the present invention, would degrade at these temperatures and even decompose at higher temperatures in this range (typically > 280°C).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully Submitted.

Date:

Peter R. Voorheis